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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,230	07/24/2003	Hiroshi Suganuma	032405.148	1286

25461 7590 10/25/2004

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ATLANTA, GA 30309-3592

EXAMINER
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PEDDER, DENNIS H

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 10/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/626,230

Applicant(s)

SUGANUMA ET AL.

Examiner

Dennis H. Pedder

Art Unit

3612

NW

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1, 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Renault, Sato et al., either reference, Iwatoto et al., or Fuji.

All listed references utilize the prior art teaching of upper and lower shock absorbers to a bumper face with different crush characteristics of the upper and lower absorbers in order to enhance impact protection to a pedestrian. The claimed spatial separation of the absorbers is in the range of the size of the lower femur of a pedestrian, hence obvious to use to restrict impact to the knee. Further, applicant states on page 10, that a bending angle of the knee on impact is set by law at 15 degrees. In view of this prior art law and the teaching of the above references, it would have been obvious to one of ordinary skill,

given the respective teachings of different crush characteristics of the upper and lower shock absorbers, to determine the crush stroke ratio within the band claimed as an obvious expedient to minimize knee loading in conjunction with statutory requirements. Note in this regard the specific teaching of Renault to provide a density to the upper absorber that is half (40 g/l) that of the lower (80 g/l). Applicant is proposing that a patent be issued to the claims of record for a mere optimization of design parameters, not deemed to be a patentable distinction. One of ordinary skill in the art would alter the absorbers material until the required knee bending angle is secured.

Further in this regard, applicant states that the reference to Fuji is not available under 35 USC 103 (c). Applicant is reminded of MPEP 706.02 (I)(2) II, page 700-55 May 2, 2004 for the required statement in order to establish common ownership, not yet provided.

As to claim 7, this is the approximate dimension of knee to ground, hence obvious to use to protect the knee.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Renault or Sato et al..

Both disclose different materials.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Renault or Iwamoto.

Both references have the upper absorber more forward.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Renault.

The determination of the exact size of the upper and lower absorber, given Renault's drawing disclosure of the upper being much larger than the lower, is deemed to be an

obvious expedient to one of ordinary skill in the art in order to conform to statutory requirements regarding knee loading.

7. The information disclosure statement filed 7/24/2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the foreign copy referred to therein has not been considered as no copy has been provided, as confirmed by the transmittal document of 7/24/2003. Scanning operations have been appraised of the alleged problem in the missing document. However, furnishing the document as filed on 7/24/2003 would effectively eliminate the problem.

8. In view of applicant's quest for patent coverage of the parameters of record, applicant is requested to provide a statement regarding statutory requirements and proposals, both national and international, for spatial separation of upper and lower absorbers and knee angle as a result of impact with a bumper.

***Response to Arguments***

9. Applicant's arguments filed 9/13/2004 have been fully considered but they are not persuasive. Please see the detailed rejection above.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

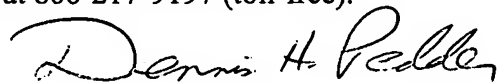
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis H. Pedder whose telephone number is (703) 308-2178. The examiner can normally be reached on 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dennis H. Pedder  
Primary Examiner  
Art Unit 3612

10/19/04

DHP  
10/29/2004